In the Specification

Please amend the paragraph beginning on page 8, line 17 as follows:

Figure 1A. Stereo view of the overlay of engrailed HTH region (α2-α3; 1ENH; in green) and one EF-Hand of parvalbumin (5PAL; in blue), to illustrate that the helical axes are colinear. The C-terminal α3 is the homeodomain DNA-recognition helix. Engrailed is shown from the lower center, directly up and then to the right; parvalbumin is shown from the lower center to the lower left, then upwards and finally to the right; and the Ca(II) ion is shown as a solid magenta sphere ~~circle~~ having lines extended therefrom representing its ligands.

Please amend the paragraph beginning on page 8, line 22 as follows:

Figure 1B. A side by side stereo view of double strand DNA (~~above~~ left; in blue) and a DNA and metal binding synthetic peptide (right; metal is shown as a blue sphere and synthetic peptide as a ribbon;~~) (below~~ in magenta and green).

Please amend the paragraph beginning on page 8, line 24 as follows:

Figure 1C. Two views of the overlay of engrailed (1ENH) helix-turn-helix (HTH) region (α2-α2) and one EF-hand of calmodulin (1OSA; third Ca-site) thus illustrating that the helices occupy the same space. The C-terminal α3 is the homeodomain recognition helix which binds in the DNA major grove. α1, α2 and α3 of Engrailed (1ENH; in blue) are shown; and calmodulin (1OSA; third Ca-site; in purple) is shown binding a metal. The Ca(II) ion is shown as a solid red sphere.

Please amend the paragraph at page 48, line 1 as follows:

Metal binding and solution structure. The binding affinity of P3 for Eu(III) was characterized by isothermal titration microcalorimetry. The dissociation constant for EuP3 was found to be 10 ± 4 μM, from which the amount of bound and free Eu(III) in solution was calculated (Table 1). Though there is only one binding site per peptide, the binding behavior was not a simple two species process. EuP3 also dimerizes at higher concentrations $K_{dim} \geq 80$ μM. However, the second metal site in the dimer has low affinity ($K_d > 1$ mM), so free Eu(III), EuP3 monomer, and a singly occupied dimer ($EuP3_2$), are the species present at concentrations below 100 μM.